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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,485	07/27/2006	Enrico Brambilla	40435	1782
PEARNE & GO	7590 10/08/201 ORDON LLP	EXAMINER		
1801 EAST 9T		CORMIER, DAVID G		
SUITE 1200 CLEVELAND, OH 44114-3108			ART UNIT	PAPER NUMBER
			1711	
			MAIL DATE	DELIVERY MODE
			10/08/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)		
Office Action Summary		10/597,485	BRAMBILLA ET AL.		
		Examiner	Art Unit		
		DAVID CORMIER	1711		
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1)☑	Responsive to communication(s) filed on 28 Ju	lv 2010			
· ·	Responsive to communication(s) filed on <u>28 July 2010</u> .  This action is <b>FINAL</b>				
/—	This action is <b>FINAL</b> . 2b) This action is non-final.				
ا ال	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
	closed in accordance with the practice under L	x parte Quayle, 1935 C.D. 11, 40	3 0.0. 213.		
Dispositi	on of Claims				
<ul> <li>4) ☐ Claim(s) 18 and 20-24 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 18 and 20-24 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>					
Applicati	on Papers				
9)□	The specification is objected to by the Examine	ſ.			
10)	The drawing(s) filed on is/are: a) ☐ acce	epted or b) objected to by the E	Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority u	ınder 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)					
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔛 Interview Summary Paper No(s)/Mail Da			
3) 🔲 Inforr	nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	5) Notice of Informal P. 6) Other:			

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#### DETAILED ACTION

## Response to Amendment/Arguments

- 1. This Office action is responsive to the amendment filed on July 28, 2010. Claims 18, and 20-24 are pending. Claims 18, and 20-24 have been amended. Claims 19 has been canceled, and Claims 1-17 are withdrawn from further consideration.
- 2. The objection to Claim 21 for being of improper dependent form is withdrawn in response to Applicant's amendments. The objection to Claim 22 for having informalities is withdrawn in response to Applicant's amendments.
- 3. The rejections of Claims 18-24 under 35 U.S.C. 112, second paragraph, as being indefinite are withdrawn in response to Applicant's amendments.
- 4. The rejection of Claims 18-22 under 35 U.S.C. 102(b) as being anticipated by Hur et al. (EP 1415585) is withdrawn in response to Applicant's amendments.
- 5. Claims 18, 19, and 21-24 were rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (US 2004/0159337) in view of Imai et al. (JP 050111451). Applicant's arguments have been fully considered but they are not persuasive. Applicant argues that water can only remain stagnant inside the sump, an outlet, or an outlet tube of the dishwasher of Johnson, and not at the bottom of the tub. Applicant also argues that Johnson does not disclose a sump. Note that www.merriam-webster.com defines a sump as "a pit or reservoir serving as a drain or receptacle for liquids." The Examiner believes that it is within a broad and reasonable interpretation of the claims to construe a sump as the bottom wall (8) of the tub (5). Also note that Johnson refers to a sump defined as a portion of the tub (5; paragraph 55). The Examiner

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also notes that the sump/bottom wall (8) of Johnson is sloped toward, and includes, a trough (129) and radial plateau portion (132; Figure 4; paragraph 36). Any water drops remaining on the bottom wall or trough would read on stagnant water after drainage inside a sump.

6. In response to Applicant's amendments, new/modified ground(s) of rejection are presented below.

## Claim Rejections - 35 USC § 112

- 7. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - a. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 8. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 9. Claim 24 recites the phrase "wherein the antibiotic agent comprises a ceramic matrix, a natural and/or synthetic zeolite..." which is indefinite. It is unclear if the antibiotic agent comprises a ceramic matrix, a natural zeolite, and/or a synthetic zeolite. It is unclear if the ceramic matrix comprises a natural and/or synthetic zeolite. For examination purposes, the clause will be interpreted as meaning that antibiotic agent comprises a ceramic matrix, a natural zeolite, and/or a synthetic zeolite.

### Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 11. Claims 18, and 20-23 are rejected under 35 U.S.C. 102(a and e) as being anticipated by Kim (US 2005/0150528).
- 12. Regarding Claim 18, Kim discloses a liquid-bearing domestic appliance comprising a dishwasher, comprising a sieve system and/or a filter (5) which is provided with at least one antibiotic agent at or adjacent to at least one surface of the sieve system and/or filter (paragraphs 35, 36, and 38), wherein the antibiotic agent is provided inside an area of the liquid-bearing domestic appliance which contains stagnant water after drainage, including a sump (10; paragraph 38).
- 13. Regarding Claims 20-23, Kim discloses the sump (5) and filter (10) are preferably made of nano-poly (resin having silver or copper) with a functional coating layer thereon (paragraphs 35, 36, 38, 45, 66). Note that being "replaceably fixed" does not impart any specific structure to the apparatus. Both of the sump and filter could be replaced. Kim further discloses that the plasma coating layer acts as a sterilizing/antibacterial/deodorizing functional layer, and the nano-poly is sterilizing/antibacterial/deodorizing to bacteria and molds (paragraphs 54, 66, 73). The functional coating layer may have TiO2 and/or silver and/or copper (paragraph 36), and the nano-poly material may have silver and copper (paragraph 66).

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# Claim Rejections - 35 USC § 103

14. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

- 15. Claims 18, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (US 2004/0159337) in view of Imai et al. (JP 05-111451; cited by Applicant).
- Regarding Claims 18, 21 and 22, Johnson discloses a dishwasher including a filter (207), which is adjacent the bottom (8) and side surfaces (9, 10, 11) of the tub (5). The tub (5) is preferably made of injection molded plastic ([0031]). Also note that Johnson refers to a sump defined as a portion of the tub (5; paragraph 55). The Examiner also notes that the sump/bottom wall (8) of Johnson is sloped toward, and includes, a trough (129) and radial plateau portion (132; Figure 4; paragraph 36).
- 17. Johnson does not expressly disclose that the surfaces adjacent the filter are provided with an antibiotic agent comprising a bacteriocidal, fungicidal, bacteriostatic, or anti-algal substance, or that the antibiotic agent is provided inside an area of the liquid bearing appliance which contains stagnant water after drainage.
- 18. Imai discloses a tableware washing machine (machine translation, abstract) in which parts of the machine are made from a resin containing antibacterial silver, copper, or zinc ions adsorbed to a calcium carbonate, calcium phosphate, or ceramic support material (abstract; also see the machine translation at page 1, lines 1-4 and 29-34; page 2, lines 1-18; page 5, lines 11-30). This resin material prevents the propagation of microorganisms such as bacteria, mold, and algae (abstract).

- 19. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Johnson, as taught by Imai, and to substitute the plastic material of the tub walls with an antibacterial resin, yielding the predictable results of preventing the propagation of microorganisms such as bacteria, mold, and algae in the dishwasher. The dishwasher having a filter adjacent an antibiotic agent would yield the claimed invention. The tub would be capable of retaining stagnant water after drainage and would contain the antibiotic agent. Note that being "replaceably fixed" does not impart any specific structure to the apparatus. The tub could be replaced
- 20. Claims 23 and 24 are considered to be taught by Johnson in view of Imai.
- 21. Regarding Claim 23, Imai discloses that the antibacterial agent comprises silver, copper, or zinc (abstract; also see the machine translation at page 1, lines 1-4 and 29-34; page 2, lines 1-18; page 5, lines 11-30).
- 22. Regarding Claim 24, Imai discloses that the antibacterial agent can comprise a ceramic support material (abstract; also see the machine translation at page 1, lines 1-4 and 29-34; page 2, lines 1-18; page 5, lines 11-30).

### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CORMIER whose telephone number is (571) 270-7386. The examiner can normally be reached on Monday - Thursday 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/ Supervisory Patent Examiner, Art Unit 1711 Application/Control Number: 10/597,485

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/DGC/ David Cormier 10/04/2010